ABSTRACT OF THE DISCLOSURE

Manufacturing tools having a base and a working surface, such as trim steels, flange steels and die inserts, are formed by fabricating or casting a substrate out of a relatively ductile, low wear-resistant metal and forming the working surfaces such as cutting edges, flanging surfaces, die surfaces and die inserts by depositing layers of relatively hard, wear-resistant materials to the substrate by closed-loop direct-metal deposition or laser cladding. A multi-axis numerically controlled robot may be used to position and move a beam and deposition material over large substrates in forming such tooling.